Pocket Delta Robot
Ultra-Precision for microassembly and manipulation of small parts

Delta Robot Advantages
- Ultra-precision handling of small components
- Up to 2 pick-and-place movements per second
- Ø 150 mm working diameter
- 3 Degrees of freedom / Repeatability ± 3 μm [3σ]
Pocket Delta Robot

Ultra-Precision for micro-assembly and manipulation of small parts

Product Description

- The Pocket Delta Robot is the ideal solution for rapid displacement or assembly of small parts. With its parallel Delta-structure it is one of the fastest and most precise robots on the market, allowing up to 2 pick-and-place motions per second.

- With a repeatability precision below 3 microns, the Pocket Delta Robot is especially well suited for micro-assembly and micro-automation tasks. The reduced weight in motion and the well engineered mechanics increase considerably the robot’s performance in speed, repeatability and precision.

About Asyril

- Asyril develops, produces and markets high performance flexible feeding systems for parts and components from <0.1 up to 150 mm in size. Our innovative 3-axis vibration technology can handle bulk parts of any geometry and allows for extremely gentle part feeding.

- Asyril’s key competences and extensive know-how encompass all three sub-domains of modern part feeding systems: vibration technology, industrial vision and precision robotics. This unique focus combined with our many years of experience enable us to deliver superior, innovative flexible feeding systems for today’s and tomorrow automation challenges.

Specifications

FEATURES

- Controller integrated above the robot
- Intuitive user-interface
- Jerk limited trajectory generation
- Configurable workspace objects
  - referential systems, points, tools
- Program-editor (text format IEC 61131)

TECHNICAL DATA

- Degrees of freedom: 3 (x,y,z)
- Multi-directional repeatability: ± 3.0 μm (3 σ)
- Workspace:
  - Ø D: 150 mm (5.9 in)
  - h1: 27 mm (1.2 in)
  - h2: 108 mm (4.1 in)
- Cycle-time:
  - 10 g: 0.40 s
  - path: 30 x 60 x 30 mm (1.2 x 2.4 x 1.2 in)
  - 20 g: 0.55 s
  - 30 g: 0.80 s
  - 40 g: 1.10 s
  - 20 g / 0.2 N
- Force in vertical direction (z)

INTERFACE

- Communication: Ethernet, TCP/IP, HTTP
- Digital I/Os:
  - 5 inputs (24 V)
  - 5 outputs (24 V)
- Power supply:
  - 24 V, 7.5 A

OPTION

- Interface for vacuum nozzle

Contact

Asyril SA
Z.I. du Vivier 22
CH-1690 Villaz-St-Pierre
SWITZERLAND

Tel +41(0) 26 653 71 90
Fax +41(0) 26 653 71 91

youtube.com/AsyrilSA

© Asyril SA - All rights reserved/ Version 09.2016